

Date: Thursday, 31/07/2008 1:38:34 PM  
User: Julie Lecocq

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services

Job Number : 40861

Estimate Number : 10429

P.O. Number :

This Issue : 31/07/2008 S.O. No. :

Prsht Rev. : NC

First Issue : 31/07/2008 Type : MACHINED PARTS

Previous Run : 40520

Written By :

Checked & Approved By : JND 08-8-01

Comment : Est: D 04.11.26 Revised Step 7 KJ/JLM

Drawing Name : TUBE ASSEMBLY

Part Number : D3304043

Drawing Number : D3304 REV. B

Project Number : N/A

Drawing Revision : B

Material :

Due Date : 08/08/2008

Qty: 8 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation:

Description :

1.0

M304TR0875W065

304 round tube .875 x .065w



Comment: Qty.: 1.9469 f(s)/Unit Total : 17.5222 f(s)

Material: AISI 304/316 SS tubing 0.875" x 0.065" wall

(M304TR0.875W.065)

Batch: 1109007mmf 08/08/22

2.0

BAND SAW

BAND SAW



Comment: BAND SAW

1- Cut blank: 22.00" as per Dwg D3304

mmf 08/08/22

3.0

LATHE CONV.

CONVENTIONAL LATHE



Comment: CONVENTIONAL LATHE

1- Cut blank: 22.00" as per Dwg D3304

2- Turn as per Dwg D3304

3- Deburr

mmf 08/08/22 SA 08/08/24

4.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SA 08/08/24

5.0

QC8

SECOND CHECK




Comment: SECOND CHECK

SA 08/08/25

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
								

NOTE: Date & initial all entries



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Job Number:



Seq. #: Machine Or Operation: Description :

6.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1- Form as per Dwg D3304

Ensure that bend radius does not fall into straight section using DT8756.

2- Drill as per Dwg D3304 using drill Jig D3304-T1

3- Cut tube to length as per Dwg D3304

4- Deburr

FF 08/08/25 9

SAD 08/08/25 (9)

7.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/08/25 (9)

8.0 D33047 Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 9.0000 Each(s)

Bracket

Pick:

Qty Part Number Description Batch  
1 D3304-7 Bracket

Batch

325067\* 7 P/08-08-28

9.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld bracket as per Dwg D3304 and QSI 004 using DT8775

P/08-08-29 (X7)

10.0 QC9 + QCS VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

acs 08/08/29 (X7)

QC9 PD 08-08-29 (7)

11.0 POWDER COATING POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

11:45  
320°F  
12:15

m-f 08/09/02

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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Drawing Name: TUBE ASSEMBLY

Job Number: 40861

Part Number: D3304043

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

08.09.02

(X7)

13.0

BLBS0016

PIP PIN



Comment: Qty.: 1.0000 Each(s)/Unit Total: 9.0000 Each(s)  
PIP PIN 7.0000

Pick:

Qty	Part Number	Description	Batch
1	BLBS-0016	Pip Pin	17108665

FF 08/09/04

(7)

14.0

CBL460

Loop Sleeve



Comment: Qty.: 2.0000 Each(s)/Unit Total: 18.0000 Each(s)  
Loop Sleeve 14.0000

Pick:

Qty	Part Number	Description	Batch
2	CBL-460	Loop Sleeve	17107234

FF 08/09/04

(7)

15.0

CBL1240

Cable



Comment: Qty.: 1.0416 f(s)/Unit Total: 9.3744 f(s)  
Cable 7.2912

Pick:

Qty	Part Number	Description	Batch
12.5"	CBL-1240	Cable	17103927

FF 08/09/04

(7)

16.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1  
Assemble lanyard and pip pin as per Dwg D3304  
Identify as D3304-043

FF 08/09/04

(7)

17.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/09/04 (X7)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Job Number: 40861

Part Number: D3304043

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with P/N and B/N as per Dwg using a permanent fine point marker, then Stock

Location: ST188

*JS 08/09/04*

19.0

QC21

FINAL INSPECTION/W/O RELEASE



*08/09/05*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*mf 08-09-05*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

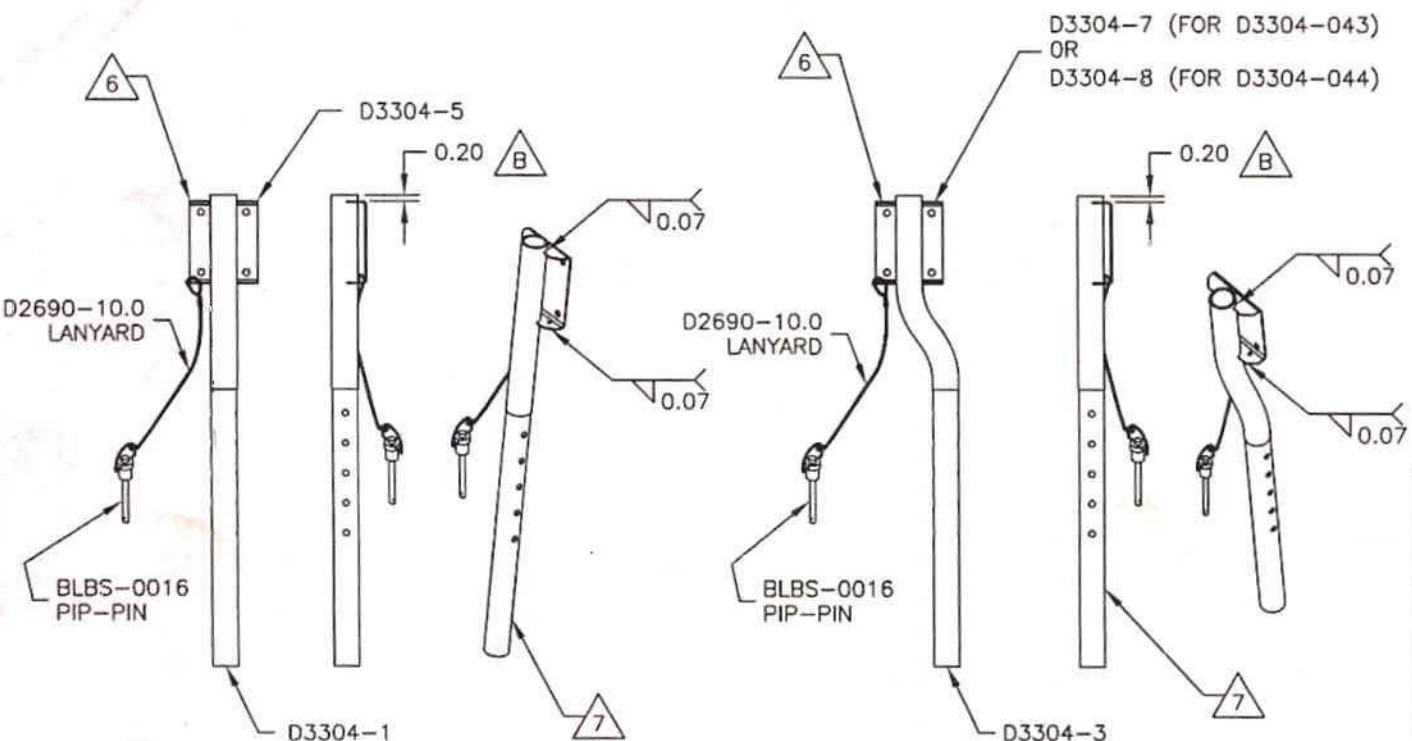
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DATE	05.07.15	TITLE	D3304	REV. B
			TUBE ASSEMBLY	SHEET 1 OF 4
				SCALE 1:6
A	04.08.18	NEW ISSUE		
B	05.07.15	UPDATE DIMENSIONS; ADD D3304-7/-8		

**D3304-041 TUBE ASSEMBLY****D3304-044 TUBE ASSEMBLY (SHOWN)  
D3304-043 OPPOSITE****D3304-041/-043/-044 NOTES:**

- 1) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 2) WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) IDENTIFY AS INDICATED USING FINE POINT PERMANENT INK MARKER "TCCA-PDA, DART AEROSPACE LTD, P/N D3304-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"
- 7) IF BEING ASSEMBLED WITH D3303-041, ADD THE FOLLOWING USING A FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D412-724-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

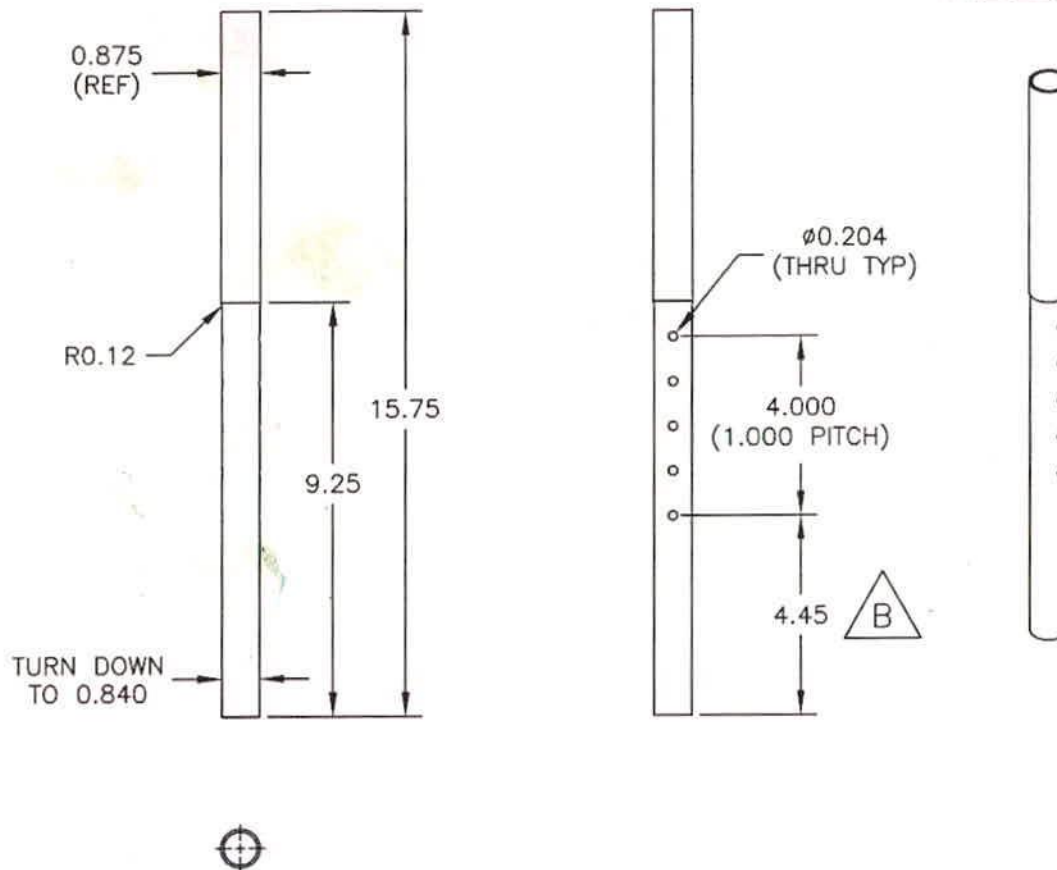
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DATE 05.07.15	TITLE TUBE ASSEMBLY		SCALE 1:4

RELEASED  
05-08-11 *[Signature]***D3304-1 TUBE****D3304-1 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE  $\phi 0.875 \times 0.065$  WALL  
(REF. DART SPEC M304TRO.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

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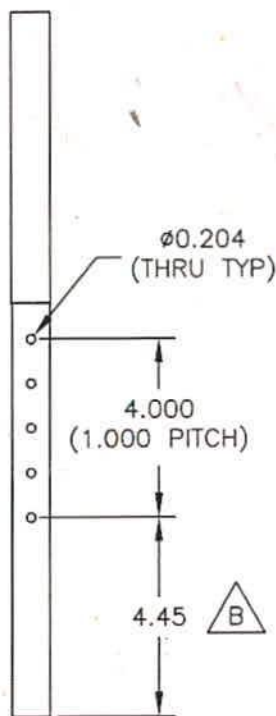
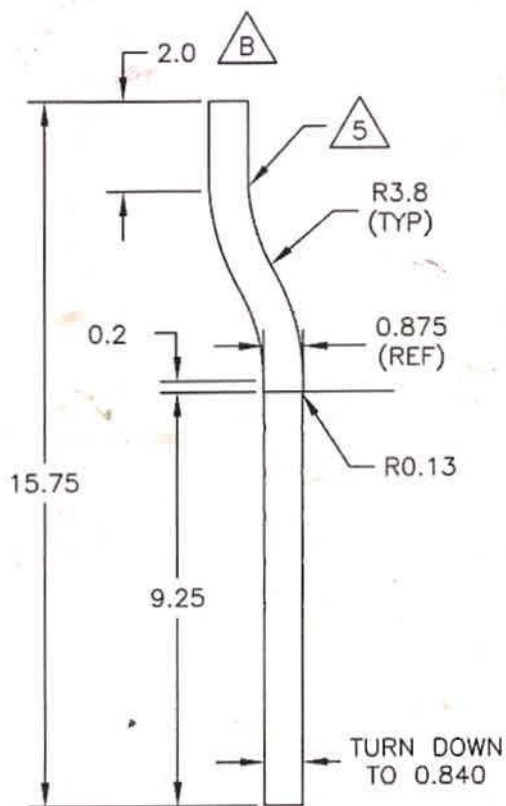
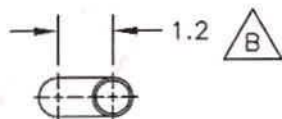
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DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4

**RELEASED**  
05-08-11 *[Signature]***D3304-3 TUBE****D3304-3 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE  $\phi 0.875 \times 0.065$  WALL (REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) BEND LINES 9.625, 13.375 DIMENSIONS

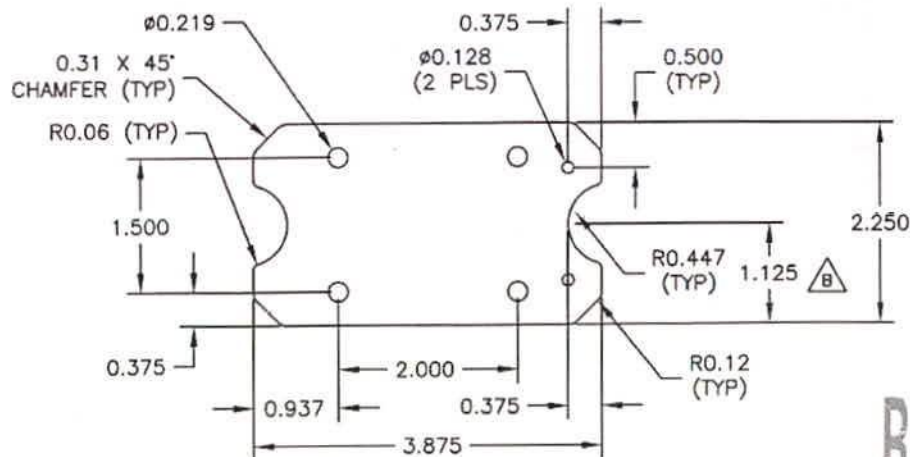
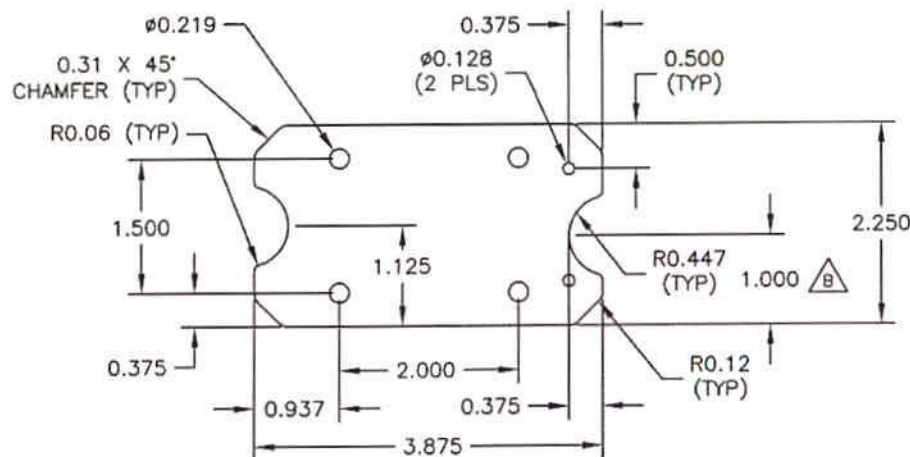
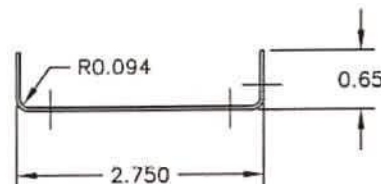
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DATE 05.07.15	TITLE TUBE ASSEMBLY		SCALE 1:2

**D3304-5 FLAT PATTERN****D3304-7/-8 FLAT PATTERN****D3304-5/-7 BRACKET  
D3304-8 OPPOSITE****NOTES:**

- 1) MATERIAL: AISI 304/316 SS 0.040 THICK SHEET (REF. DART SPEC M304S20GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

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